

Table 7. Analytical Methods
Southeast Leg Pond Area Phase 2 Sampling
Hatco Remediation Project
Woodbridge, New Jersey

Matrix	Analytical Method	Parameter	No. of Samples	No. of Trip Blanks	Frequency of Trip Blanks	No. of Field Blanks ^(a)	Frequency of Field Blanks	No. of Duplicate Samples ^(b)	Frequency of Laboratory-Blind Duplicate Samples	No. of MS/MSD Samples	Frequency of MS/MSD Samples
Phase 2 - Surface Water	6020B	TAL Metals	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	7470A	Mercury	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	8082A	PCBs	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	8260D	Selected VOCs	12	1	1 per sample shipment	2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	8270E_SIM	SVOC - SIM Analytes	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	8270E	TCL SVOC	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	NJDEP	EPH	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
	Field measurement	pH	12	0		2	1 per day	1	1 per 20 analyzed	1	1 per batch of 20 samples
Phase 2 - Surface Soil	8082A	PCBs	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	6020B	TAL Metals	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	7471B	Mercury	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	8260D	Selected VOCs	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	8270E	TCL SVOC	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	NJDEP	EPH	25	0		3	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
Phase 2 - Sediment	8082A	PCBs	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	6020B	TAL Metals	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	7471B	Mercury	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	8260D	Selected VOCs	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	8270E	TCL SVOC	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	Lloyd Kahn	Total Organic Carbon	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	NJDEP	EPH	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples
	9045D	pH	44	0		5	1 per day	2	1 per 20 analyzed	2	1 per batch of 20 samples

Notes:

^(a) Total number of field blanks will depend upon the duration of the sampling event. Estimated quantities are based on the following tentative schedule: Surface water and transect sampling is expected to take two days. The remaining sampling is expected to take three days to complete.

MS/MSD Matrix spike/matrix spike duplicate sample

PCBs Total Polychlorinated Biphenyls

SIM Selected-Ion Monitoring

TCL SVOC Target Compound List semi-volatile organic compounds.

Selected VOCs Volatile Organic Compounds: Acetone, benzene, 2-butanone, ethylbenzene, methylcyclohexane, 2-methyl-2-propanol, toluene, xylenes.

EPH Extractable petroleum hydrocarbons, non-fractionated

5/3/21 Note: Lab changed the surface waters method for Mercury to 7470. For NPDES work the Mercury would be run by 245.1. Lab changed TOC Soil method from 9060A to Lloyd Kahn

Revised May 4, 2021

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Table 8. Sample Preservation Requirements
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Woodbridge, New Jersey

Matrix	Parameters	Sample Container*	Minimum Mass (g)	Analytical Method	Sample Preservation	Holding Time
Surface Water	TAL Metals	250 mL HDPE	100	6020B	Ultra HNO ₃ to pH < 2	180 days
	Mercury	250 mL HDPE	100	7470A	HNO ₃ to pH < 2	28 days
	PCBs	2 x 1 L amber glass	1000	8082A	Cool to 4°C ± 2°C	7 days to extraction; 40 days from extraction to analysis
	Selected VOCs	4 x 40 mL VOA vials	40	8260D	Cool to 4°C ± 2°C, HCl to pH < 2 (no headspace)	14 days
	SVOC - SIM Analytes	2 x 1 L amber glass	1000	8270E_SIM	Cool to 4°C ± 2°C	7 days to extraction; 40 days from extraction to analysis
	TCL SVOCs	2 x 1 L amber glass	1000	8270E	Cool to 4°C ± 2°C	7 days to extraction; 40 days from extraction to analysis
	EPH	2 x 1 L amber glass	500	NJDEP	Cool to 4°C ± 2°C, HCl	14 days to extraction; 40 days from extraction to analysis
	pH	field measurement	50	field measurement	field measurement	15 minutes
Soil and Sediment	PCBs	4 oz glass w/Teflon lid	20	8082A	Cool to 4°C ± 2°C	14 days to extraction; 40 days from extraction to analysis
	TAL Metals	4 oz glass w/Teflon lid	2	6020B	None	180 days
	Mercury	4 oz glass w/Teflon lid	28	7471B	None	28 days
	Selected VOCs	3 EnCore® Samplers and 20 mL HDPE	3/sample	8260D	Cool to 4°C ± 2°C	48 hours for extraction; 14 days for analysis
	TCL SVOC	4 oz glass w/Teflon lid	20	8270E	Cool to 4°C ± 2°C	14 days to extraction; 40 days from extraction to analysis
	Total Organic Carbon	4 oz glass w/Teflon lid	2	Lloyd Kahn	Cool to 4°C ± 2°C	28 days
	EPH	4 oz glass w/Teflon lid	10	NJDEP	Cool to 4°C ± 2°C	14 days to extraction; 40 days from extraction to analysis
	pH	4 oz glass w/Teflon lid	20	9045D	Cool to 4°C ± 2°C	24 Hours

Notes:

* Coordinate with laboratory regarding use of discrete sample aliquots for multiple analyses.

°C	Degrees Celsius	NaOH	Sodium hydroxide
g	gram	PCBs	Polychlorinated biphenyls
EPH	Extractable petroleum hydrocarbons	SIM	Selected-Ion Monitoring
HDPE	high density polyethylene	SVOCs	Semi-Volatile Organic Compounds
HNO ₃	Nitric acid	TAL	Target Analyte List
H ₂ SO ₄	Sulfuric acid	TCL	Target Compound List
L	liter	VOCs	Volatile Organic Compounds (see Table 7 for list of selected VOCs)
mL	milliliter		
oz	ounce		

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